

**CLAIM AMENDMENTS**

Please add the following new claim:

406. The method of claim 402, wherein said desired soft tissue comprises an artery.

**LISTING OF CLAIMS**

Claims 1-381  
(canceled)

Claim 382  
(previously presented)

A method for producing and integrating tissue consisting of a desired soft tissue at a selected site in a body of a human patient comprising:

- (a) Placing cells in said body of said human patient;
- (b) Forming a bud at said selected site in said body of said human patient; and
- (c) Growing said desired soft tissue which integrates itself into said body of said human patient from said bud.

Claim 383  
(previously presented)

The method of claim 382, wherein said cells are multifactorial and non-specific.

Claim 384  
(previously presented)

The method of claim 383, wherein said cells comprise stem cells.

Claim 385  
(previously presented)

The method of claim 382 further comprising forming a new artery.

Claim 386  
(previously presented)

The method of claim 383 further comprising forming a new artery.

Claim 387  
(previously presented)

The method of claim 382, wherein said soft tissue comprises mesodermal tissue.

Claim 388  
(previously presented) The method of claim 382, wherein said soft tissue comprises an artery.

Claim 389  
(previously presented) The method of claim 382, wherein said cells comprise stem cells.

Claim 390  
(previously presented) The method of claim 389, wherein said soft tissue comprises an artery.

Claim 391  
(previously presented) The method of claim 382, wherein said cells comprise pluripotent cells.

Claim 392  
(previously presented) The method of claim 391, wherein said soft tissue comprises an artery.

Claim 393  
(previously presented) The method of claim 391, wherein said cells comprise stem cells.

Claim 394  
(previously presented) The method of claim 393, wherein said stem cells are multifactorial and non-specific.

Claim 395  
(previously presented) The method of claim 382, wherein said cells are injected into said body.

Claim 396  
(previously presented) The method of claim 382, wherein said cells are locally placed into said body.

Claim 397  
(previously presented) The method of claim 396, wherein said cells comprise stem cells.

Claim 398  
(previously presented) The method of claim 396, wherein said cells are injected intramuscularly.

Claim 399 (previously presented)	The method of claim 397, wherein said stem cells are injected intramuscularly.
Claim 400 (previously presented)	The method of claim 388 further comprising determining blood flow through said new artery.
Claim 401 (previously presented)	The method of claim 388 further comprising observing said new artery.
Claim 402 (previously presented)	The method of claim 399, wherein said selected site comprises a leg of said patient.
Claim 403 (previously presented)	A method for growing and integrating tissue consisting of desired soft tissue at a selected site in a body of a human patient wherein said desired soft tissue comprises a desired artery comprising the steps of:  (a) locally injecting stem cells into said body at said selected site;  (b) forming a bud at said selected site; and  (c) growing said desired artery from said bud wherein said artery integrates itself into said body of said human patient at said selected site.
Claim 404 (previously presented)	The method of claim 403, wherein said selected site comprises a damaged site in a leg of said patient and said stem cells are injected intramuscularly.

Claim 405  
(previously presented)

The method of claim 403, wherein said selected site comprises a damaged site in a heart of said patient and said stem cells are injected intramuscularly.

Claim 406  
(new)

The method of claim 402, wherein said desired soft tissue comprises an artery.